

STATEMENT OF THE CLAIMS

1 - 2 (cancelled)

3. (currently amended) A method of handling material comprising:

packaging material into elongate bags;

automatically arranging the elongate bags into groups, wherein at least one group has a cross-stacked configuration wherein a first set of bags are disposed side-by-side along their lengths and at least one additional bag is disposed orthogonal to and adjacent said first set of bags; and

automatically lifting and transporting said groups of elongate bags, group by group, to form a multi-row stack of elongate bags, said lifting and transporting accomplished by applying opposed clamping forces to opposite sides of at least one group having a cross-stacked configuration while preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another, said opposed clamping forces being applied to only two sides of the at least one group and said opposed clamping forces alone being sufficient to lift the at least one group.

4. (original) A method according to claim 3, further comprising:

lifting and transporting the multi-row stack of elongate bags for transport to a customer.

5. (original) A method according to claim 3, wherein:

the material comprises loose-fill thermal insulation product.

6. (original) A method according to claim 5, wherein:

said loose-fill thermal insulation product comprises glass-fiber material.

7. (original) A method according to claim 5, wherein:

said loose-fill thermal insulation product comprises cellulose material.

8. (original) A method according to claim 5, wherein:

said elongate bags each have dimensions of about 38" by 21" by 8.5" and carry about 27 lbs. of product.

9. (original) A method according to claim 3, wherein:

said elongate bags comprise a polymer.

10. (original) A method according to claim 3, wherein:

wherein each group of elongate bags is transported by a conveyor assembly.

11. (original) A method according to claim 3, wherein:

said cross-stacked configuration comprises two bags disposed side-by-side along their lengths and one additional bag disposed orthogonal to and adjacent the two bags.

12. (currently amended) A method according to claim 3, wherein:

said automatic lifting and transporting said groups of elongate bags is carried out by a stacker machine having a moveable stacker head with two fingers that apply opposed clamping forces to grip a given group of elongate bags and at least one support structure that is operably disposed between bags disposed side-by-side in said cross-stacked configuration to prevent such bags from sliding past one another while not providing resistance to the opposed clamping forces.

13. (original) A method according to claim 12, wherein:

said support structure comprises at least one chain.

14. (previously presented) A method according to claim 12, wherein:

said support structure comprises one of wire strands and rope strands.

15. (previously presented) A method according to claim 4, wherein:

said lifting and transporting of said multi-row stack is carried out by a lift truck having two clamp members that translate relative to one another to apply opposed clamping forces for grasping and lifting a group of elongate bags positioned therebetween, and a central support bar laterally disposed below and between said two clamp members for preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

16. (original) A method according to claim 15, wherein:

said central support bar fits into a slot in a conveyor belt system to facilitate positioning the two clamps members around a group of elongate bags.

17. (currently amended) A material handling system material comprising:

means for packaging material into elongate bags;

means for automatically arranging the elongate bags into groups, wherein at least one group has a cross-stacked configuration wherein a first set of bags are disposed side-by-side along their lengths and at least one additional bag is disposed orthogonal to and adjacent said first set of bags; and

means for automatically lifting and transporting said groups of elongate bags, group by group, to form a multi-row stack of elongate bags, including means for applying opposed clamping forces to opposite sides of at least one group having a cross-stacked configuration while preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another, said opposed clamping forces being applied to only two sides of the at least one group and said opposed clamping forces alone being sufficient to lift the at least one group.

18. (original) A material handling system according to claim 17, wherein:

the material comprises loose-fill thermal insulation product.

19. (original) A material handling system according to claim 18, wherein:

said loose-fill thermal insulation product comprises glass-fiber material.

20. (original) A material handling system according to claim 18, wherein:

said loose-fill thermal insulation product comprises cellulose material.

21. (original) A material handling system according to claim 18, wherein:

said elongate bags each have dimensions of about 38" by 21" by 8.5" and carry about 27 lbs. of product.

22. (original) A material handling system according to claim 17, wherein:

said elongate bags comprise a polymer.

23. (original) A material handling system according to claim 17, wherein:

wherein each group of elongate bags is transported by a conveyor assembly.

24. (original) A material handling system according to claim 17, wherein:

each group comprises two bags disposed side-by-side along their lengths and one additional bag disposed orthogonal to and adjacent the two bags.

25. (currently amended) A material handling system according to claim 17, wherein:

said means for automatically lifting and transporting said groups of elongate bags comprises a stacker machine having a moveable stacker head with two fingers that apply opposing clamping forces to grip a given group of elongate bags and at least one support structure that is operably disposed between bags disposed side-by-side in said cross-

stacked configuration to prevent such bags from sliding past one another while not providing resistance to the opposed clamping forces.

26. (original) A material handling system according to claim 25, wherein:

said support structure comprises at least one chain.

27. (previously presented) A material handling system according to claim 25, wherein:

said support structure comprises one of wire strands and rope strands.

28. (previously presented) A material handling system according to claim 17, wherein:

said means for automatically lifting and transporting said groups of elongate bags comprises a lift truck having two clamp members that translate relative to one another to apply opposed clamping forces for grasping and lifting a group of elongate bags positioned therebetween, and a central support bar laterally disposed below and between said two clamp members for preventing elongate bags disposed side-by-side in said cross-stacked configuration from sliding past one another.

29. (original) A material handling system according to claim 28, further comprising:

a conveyor belt system having a slot adapted to receive said central support bar to thereby facilitate positioning the two clamps members around a group of elongate bags supported by said conveyor belt system.

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36. (previously presented) A method according to claim 3, wherein:

said multi-row stack of elongate bags has a bottom row with a cross-stacked configuration.

37. (previously presented) A material handling system according to claim 17, wherein:

said multi-row stack of elongate bags has a bottom row with a cross-stacked configuration.